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nucleus—not over its entire area, but at short intervals from one side to the other, even over its blackest portion. These stars of brilliant blue light were on the average about twice as broad as the dark F line on the general disk, sometimes four times as broad, and were but little displaced, if at all.

The observations were made by Mr. Maunder throughout.

Royal Observatory, Greenwich:
1883, *Jan.* 12.

Spectroscopic Results for the Motions of Stars in the Line of Sight, obtained at the Royal Observatory, Greenwich, in the Year 1882. No. VI.

(*Communicated by the Astronomer Royal.*)

The results here given are in continuation of those printed in the *Monthly Notices*, vol. xxxvi. p. 318, vol. xxxvii. p. 22, vol. xxxviii. p. 493, vol. xli. p. 109, and vol. xlii. p. 230. The observations were made with the "half-prism" spectroscope, one "half-prism" with a dispersion of about 18½° from A to H being used. An eyepiece with a magnifying power of 14 was employed throughout.

Up to 1882, March 13, a convex cylindrical lens, with its axis parallel to the length of the spectrum, and placed in the view-telescope within the focus, and a concave or Barlow lens of 2 inches focus placed in the collimator between the slit and the object-glass, as used throughout the year 1881, were employed. On March 14, the Barlow lens was removed, and the cylindrical lens was placed in front of the slit, as in the observations made previously to 1881. In most of the observations a diaphragm coated with Balmain's luminous paint has been used in the micrometer-adapter to give a phosphorescent illumination of the field.

The observations of the Moon and of the sky spectrum have been made as a check on the general accuracy of the results.

Motions of Stars in the Line of Sight, in Miles per Second, observed with the Half-prism Spectroscope.

(+ denotes Recession ; − Approach.)

The initials M. and N. are those of Mr. Maunder and Mr. Nash respectively.

Date.	Obs.	No. Meas.	of Line.	Earth's Motion in M. per sec.	Concluded Motion of Stars. Meas.	Concluded Motion of Stars. Estimd.	Remarks.
					β Cassiopeiæ.		
1882.							
July 24	M	2	F	−11·2	+34·1	+33·9	Clouds constantly passing. Observation unsatisfactory.

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Date.	Obs.	No. of Meas.	Line.	Earth's Motion in M. per sec.	Concluded Motion of Stars.		Remarks.
					Meas.	Estimd.	
					γ Pegasi.		
1882							
Nov. 9	M	2	F	+11·8	−41·1	−39·6	Definition poor.
					β Persei.		
Nov. 9	M	2	F	− 2·1	+18·1	+17·3	Definition fair.
					α Persei.		
Nov. 8	N	1	F	− 4·2	−30·2	−30·3	Definition good.
					Capella.		
Oct. 20	N	2	b_1	−13·7	+33·4	+28·2	Observation unsatisfactory.
Nov. 9	M	2	F	− 9·3	+22·5	+22·6	Definition fair.
10	N	2	F	− 9·1	+19·9	+24·8	„ good.
					γ Orionis.		
Feb. 10	M	3	F	+16·0	+ 8·5	+ 5·4	Cloud passing. Measures made with difficulty.
					β Tauri.		
Feb. 10	M	3	F	+16·4	−34·0	−31·3	Definition good.
					γ Geminorum.		
Mar. 14	M	4	F	+18·0	−26·4	−27·4	Definition poor.
					Sirius.		
Feb. 10	M	6	F	+ 9·3	− 1·7	− 3·3	Definition good.
Mar. 14	M	5	F	+13·6	+ 0·7	+ 6·4	Definition good.
Apr. 5	M	3	F	+14·1	+10·9	+15·4	„ fair.
8	M	6	F	+14·0	+ 8·2	+ 8·9	„ good.
					Castor.		
Feb. 10	M	4	F	+10·3	+19·9	+15·3	Definition fair.
Mar. 14	M	3	F	+16·7	+ 8·5	+18·0	„
Apr. 5	M	2	F	+18·0	+22·5	+24·4	„
					Procyon.		
Feb. 10	M	2	F	+ 8·5	+27·6	+24·1	Definition good.
Mar. 14	M	4	F	+15·5	+ 3·2	+ 9·3	Definition fair.
Apr. 5	M	2	F	+17·4	+18·8	+21·5	„
					Pollux.		
Feb. 10	M	4	F	+ 9·3	−14·4	−12·1	Definition good.
Mar. 14	M	2	F	+16·3	−40·3	−43·6	„ poor.

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Date.	Obs.	No. of Meas.	Line.	Earth's Motion in M. per sec.	Concluded Motion of Stars.		Remarks.
					Meas.	Estimd.	
					δ Leonis.		
1882.							
Apr. 8	M	2	F	+11·2	−35·0	−35·5	Definition fair. Spectrum steady.
					θ Leonis.		
Apr. 8	M	3	F	+10·9	+ 5·7	+ 4·0	Star-line broad and faint.
					α Virginis.		
Apr. 8	M	4	F	− 0·1	−21·2	−22·3	Spectrum bright, but tremulous.
					Arcturus.		
June 12	M	2	F	+13·2	−30·4	−28·6	Definition good.
Aug. 8	M	2	b_1	+14·1	−54·8	−69·1	" poor.
	N	1	b_1	+14·1	−53·9	−69·1	
					β Libræ.		
June 12	M	2	F	+ 9·9	−37·5	−38·7	Spectrum very faint.
					α Coronæ.		
Apr. 8	M	2	F	− 4·8	+18·8	+21·6	Definition poor.
June 14	M	4	F	+ 8·7	+41·2	+35·5	" good.
					α Ophiuchi.		
June 14	M	4	F	− 0·8	+31·6	+28·7	Definition fair.
July 10	M	2	F	+ 6·7	−41·2	−45·2	Definition good, but spectrum faint.
					γ Draconis.		
Aug. 21	M	2	b_1	+ 4·2	− 9·0	−10·2	Wind high. Definition poor.
					α Lyræ.		
June 14	M	2	F	− 2·9	−26·7	−27·9	Definition good.
July 29	M	2	F	+ 3·3	−42·0	−45·0	Spectrum fairly steady.
Aug. 4	M	2	F	+ 4·1	−34·5	−28·8	Definition good.
Nov. 8	N	4	F	+ 7·5	−53·2	−46·4	Spectrum very bright.
					ζ Aquilæ.		
Aug. 2	M	2	F	+ 5·5	−20·1	−21·8	Spectrum faint. Observation unsatisfactory.
					β Cygni.		
Aug. 21	M	4	b_1	+ 5·8	−28·2	−34·2	Wind high. Definition very poor.

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Date.	Obs.	No. of Meas.	Line.	Earth's Motion in M. per sec.	Concluded Motion of Stars.		Remarks.
					Meas.	Estimd.	
					γ Aquilæ.		
1882.							
Aug. 8	M	2	b_1	+ 4·5	−21·8	−20·9	Definition good.
	N	1	b_1	+ 4·5	−16·0	−4·5	
					α Aquilæ.		
June 14	M	4	F	− 9·2	−22·2	−18·3	Definition good.
July 12	M	2	F	− 2·6	−33·3	−41·1	Spectrum faint. Cloud forming.
Aug. 2	M	2	F	+ 2·8	+13·1	+16·7	Definition good.
					γ Cygni.		
Aug. 21	M	2	b_1	+ 1·0	−16·1	−21·0	Wind high. Definition poor.
					α Delphini.		
Aug. 2	M	2	F	− 1·4	−10·9	−11·6	Spectrum faint. Observation unsatisfactory.
					α Cygni.		
July 15	M	2	F	− 5·8	−28·2	−30·9	Definition variable.
Aug. 4	M	2	F	− 3·2	−17·0	−17·4	„ good.
	N	2	F	− 3·2	−16·6	−16·0	
Aug. 21	M	2	b_1	− 0·8	−31·0	−49·1	Wind high. Definition fair.
Oct. 7	M	2	b_1	+ 6·0	−42·2	−53·9	Spectrum faint, owing to mist, but steady.
					ζ Cygni.		
Aug. 21	M	2	b_1	− 0·6	+ 0·8	+ 0·6	Definition poor.
					η Pegasi.		
Aug. 8	N	2	b_1	− 9·0	+ 1·2	+ 0·8	Definition fair.
	M	2	b_1	− 9·0	+ 9·5	+ 9·0	
					α Pegasi.		
July 24	M	2	F	−12·8	−13·3	−18·7	Clouds passing. Observation unsatisfactory.
Aug. 2	M	2	F	−11·1	− 8·9	− 9·8	Definition good.
Nov. 9	M	4	F	+14·6	−46·7	−43·0	Definition very poor.
					Moon.		
July 29	M	5	F		− 3·0		Moon spectrum faint. Definition fair.
Aug. 2	M	5	F		+ 2·6		

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Date.	Obs.	No. of Meas.	Line.	Earth's Motion in M. per sec.	Concluded Motion of Stars. Meas.	Estimd.	Remarks.
					Sky Spectrum.		
1882.							
Feb. 11	M	5	F		+ 1·2		Hydrogen spectrum faint; comparison difficult.
Mar. 14	M	5	F		+ 2·7		
Apr. 6	M	5	F		− 3·9		

Royal Observatory, Greenwich:
1883, *Jan.* 12.

Observation of the Great Comet (b) 1882, *made with the Transit Circle at the Royal Observatory, Greenwich.*

(*Communicated by the Astronomer Royal.*)

1882.	Greenwich Mean Solar Time.	Observer.	R.A.	N. P. D. (Corrected for Refraction and Parallax.)
	h m s		h m s	° ′ ″
Nov. 26	16 37 31	A. D.	9 1 29·93	117 46 39·59

Comet very faint; appeared elongated in a direction inclined 45° to the parallel of declination. The brightest part at about one-third of the way from the north end of the elongation to the south was observed.

Royal Observatory, Greenwich.
1883, *Jan.* 12.

Observations of the Great Comet (b) 1882.

By Charles Leeson Prince.

The Society has doubtless received, and will continue to receive, many details of the appearance of the great comet which has lately visited our region in space, and as the weather during the month of October, which was the most important period for making good observations in England, was extremely unfavourable, I beg to forward to the Society a few notes of what I was able to record at my Observatory upon the only possible opportunities. My first view of the stranger was at 5 A.M. on Oct. 4, and my first impression was that its general aspect was grander than that of Donati's in 1858, and exceeded in brilliancy of detail the great comet of 1861. As the nucleus was much enveloped in a mist which lay along the horizon, it was not very well defined in the telescope, but appeared to be oval, or pear-shaped, of a diffused orange colour, and without any very definite appendage surrounding it. The tail was nearly 25° long, and of great breadth at its extremity. I had no further opportunity of seeing it again until the morning of the 10th, when it was decidedly brighter than on the 4th; but this effect might have been partly due to my time of observation having been somewhat earlier.